



Hydrology of Mediterranean and Semiarid Regions

Edited by

ERIC SERVAT

IRD, UMR HydroSciences Montpellier (CNRS, UM2, IRD, UMI), Maison des Sciences de l'Eau, BP 64501, F-34394 Montpellier Cedex 5, France

WAJDI NAJEM

ESIB, Faculté d'Ingénierie de l'Université Saint-Joseph, BP 1514, Beyrouth, Liban

CHRISTIAN LEDUC

IRD, UMR HydroSciences Montpellier (CNRS, UM2, IRD, UMI), Maison des Sciences de l'Eau, BP 64501, F-34394 Montpellier Cedex 5, France

AHMED SHAKEEL

Indo-French Centre for Groundwater Research, National Geophysical Research Institute, Uppal Road, Hyderabad 500 007, India

Papers selected for the international conference on:
Hydrology of the Mediterranean and Semi-Arid Regions
held in Montpellier, France, from 1 to 4 April 2003.

This conference was jointly convened by:
UNESCO (United Nations Educational and Cultural Organization)
IAHS (International Association of Hydrological Sciences)
WMO (World Meteorological Organization)
FRIEND AMHY (Flow Regimes from International Experimental and Network Data, Alpine and Mediterranean Region)
IFR ILEE (Institut Fédératif de Recherche, Institut Languedocien de Recherche sur l'Eau et l'Environnement)

IAHS Publication no. 278
in the IAHS Series of Proceedings and Reports

**Published by the International Association of
Hydrological Sciences 2003**

IAHS Press, Centre for Ecology and Hydrology, Wallingford,
Oxfordshire OX10 8BB, UK

IAHS Publication no. 278

ISBN 1-901502-12-0

British Library Cataloguing-in-Publication Data.

A catalogue record for this book is available from the British Library.

© IAHS Press 2003

This publication may be reproduced as hard copy, in whole or in part, for educational or nonprofit uses, without special permission from the copyright holder, provided acknowledgement of the source is made. As a courtesy the authors should be informed of any use made of their work. No use of this publication may be made for electronic publishing, resale or other commercial purposes without the prior written permission of IAHS Press.

The papers included in this volume have been peer reviewed and some were extensively revised before publication.

IAHS is indebted to the employers of the Editors for the invaluable support and services provided that enabled them to carry out their task effectively and efficiently.

The designations employed and the presentation of material throughout the publication do not imply the expression of any opinion whatsoever on the part of IAHS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The use of trade, firm, or corporate names in the publication is for the information and convenience of the reader. Such use does not constitute an official endorsement or approval by IAHS of any product or service to the exclusion of others that may be suitable.

The papers were checked, formatted and assembled by Cate Gardner and Penny Farnell at IAHS Press, Wallingford, UK.

Publications in the series of Proceedings and Reports are available *only* from:
**IAHS Press, Centre for Ecology and Hydrology, Wallingford,
Oxfordshire OX10 8BB, UK**

tel.: +44 1491 692442; fax: +44 1491 692448; e-mail: jilly@iahs.demon.co.uk